

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Muthiah Manoharan

Group Art Unit: 1635

Examiner: Not Yet Assigned

For: CARBOHYDRATE OR 2'-MODIFIED
OLIGONUCLEOTIDES HAVING
ALTERNATING INTERNUCLEOSIDE
LINKAGES

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; and

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a



Utility Patent



Design Patent

is sought on the invention, whose title appears above, the specification of which:



is attached hereto.



was filed on July 7, 1999 as Serial No. 09/349,007 .



said application having been amended on _____ .

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to the patentability of this application in accordance with 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a-d) of any **foreign application(s)** for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of any application on which priority is claimed:

Priority Claimed (If X'd)	Country	Serial Number	Date Filed
<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	_____	_____	_____

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Serial Number	Date Filed	Patented/Pending/Abandoned
<u>09/115,025</u>	<u>July 14, 1998</u>	<u>Pending</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Serial Number

Date Filed

I hereby appoint the following persons of the firm of **WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS LLP**, One Liberty Place - 46th Floor, Philadelphia, Pennsylvania 19103 as attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Michael P. Straher, Esq. Reg. No. 38,325

John W. Caldwell, Esq. Reg. No. 28,937

and

Herb Boswell Reg. No. 27,311

Laurel Bernstein Reg. No. 37,280

Henry Wu Reg. No. 44,412

of **ISIS PHARMACEUTICALS, INC.**, 2292 Faraday Avenue, Carlsbad, California 92008.

Address all telephone calls and correspondence to the first-listed attorney of record at:

**WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP**

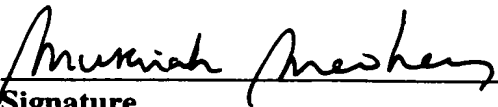
One Liberty Place - 46th Floor

Philadelphia PA 19103

Telephone No.: (215) 568-3100

Facsimile No.: (215) 568-3439

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: Muthiah Manoharan	 Signature
Mailing Address: 7634 Reposado Drive, Carlsbad, California 92009	Date of Signature: <u>August 18 1991</u>
City/State of Actual Residence: Carlsbad, California 92009	Citizenship: <u>U.S.</u>

T0260" T999660